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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,981	07/25/2003	Ryan Philip Lindsay	780139.00011	4138

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EXAMINER

LUM VANNUCCI, LEE SIN YEE

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,981

Applicant(s)

LINDSAY ET AL.

Examiner

Lee Lum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 17, 18 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 18 and 20-27 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 28 is/are rejected.
- 7) ☒ Claim(s) 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. An Amendment was filed 12/16/04 in which Claims 14-16 and 19 were also cancelled, and Claims 26-28 added. The Claims remaining are 1-13, 17, 18 and 20-28.

2. The disclosure is objected to because the following elements lack antecedent basis:

in Claim 13 – previous driving mode,
in Claim 22 - operator control.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claims 1-3, 7-10, 12 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fortin 6776249 in view of Nicholls et al 4691148.

Fortin discloses a material handling vehicle comprising
Drive system 1,
Steering mechanism 3 controlled by the operator, and being movable along an arc between horizontal and vertical positions (fig 1),
Brake (unidentified, c4, In 7-9; "braking segments"),
Angular position indicator (unidentified, c4, In 17-19, 26-28) activated by the steering mechanism, and providing a signal re the angle of movement of the latter,
Controller 12 receiving the signal, and placing the vehicle in one of a plurality of successive driving states based on the angle of movement (c4, In 26-28),
The driving states including at least top and bottom braking modes, slow and fast speeds (c4, first complete paragraph),

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wherein the slow and fast speeds are within a range, or a predetermined maximum (c4, ln 35-41), and,
the braking modes are at first and second angles, toward the vertical, and horizontal, respectively, (c4, ln 7-9).

The reference does not disclose the signal from the position indicator as comprising at least two bits, while Nicholls shows this feature in c5, ln 13-14; "two-bit binary signal". It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this type of signal, as shown in Nicholls, to provide an adequate number of modes to be transmitted to/from the signal generator element, and a controller, thus efficiency and performance is increased.

As well-known, a maximum of four modes are represented by a two-bit code. In this case, this feature corresponds to the four different braking modes. Therefore, this signal representation is very efficient for the invention. It is also well-known that while any number of bits may be utilized for the particular application, this characteristic does not affect the proper function of the invention.

B. **Claims 4 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fortin in view of Nichols, and in further view of Montemurro 4444284.

Fortin does not disclose the position indicator as comprising first and second switches, while Montemurro shows this configuration with

Position indicator 67 (as part of the steering mechanism 42),

(At least) first 140, and second 128, switches,

the switches activated/deactivated via cammed surface 92 (figs 9,10), as discussed in c4, third complete paragraph.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this arrangement, as shown in Montemurro, to provide several travel modes in an compact and efficient manner, thus increasing performance and decreasing cost, weight and complexity.

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C. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fortin in view of Nichols and Montemurro, and in further view of Miller et al 3809833.

The previous references do not disclose different angles being effected by activation/deactivation of (at least) two switches. Miller teaches this arrangement in col 6, where various switches are activated/deactivated via (main) cam 28, as provided in c5, ln 39-47, and entire col 6, and, as depicted in figs 9-11.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this configuration, as shown in Miller, to provide a compact and efficient means to provide several operational modes, thus increasing performance with decreased cost, weight and complexity. It is well-known to configure switches to effect various modes in an alternating manner.

4. ALLOWABLE SUBJECT MATTER

a. **Claims 11 and 13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, including resolution of any objections. Prior art does not disclose a vehicle having a steering mechanism as described above further comprising, *inter alia*, the controller monitoring the operator control for a delay in driving, and applying the brake when no driving occurs for a certain time period.

b. **Claims 20-26 are allowable.** Prior art does not disclose a vehicle vehicle having a steering mechanism as described above, further comprising switches providing two-bit signals, nor the controller applying a brake if there is a nonsequential transition between driving states.

c. **Claims 17, 18 and 27 are allowable.** Prior art does not disclose a vehicle having a steering mechanism as described above, further comprising the controller monitoring the operator control for a delay in driving, and applying the brake when no driving occurs for a certain time period.

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5. RESPONSE TO REMARKS

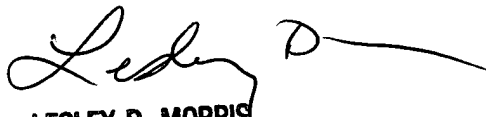
Upon reconsideration, Examiner has modified rejections employing Fortin in view of Montemurro, and Miller. She apologizes for the inconvenience. Applicant is asked to note allowable subject matter.

6. Communication with USPTO/Examiner

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 571 272-6649, M-Th, 9-6. If attempts to reach the examiner are unsuccessful, her supervisor, Ms. Lesley Morris, is at 571 272-6651. Our fax number is 703 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications: private PAIR only, for published applications: private or public PAIR. For more information re PAIR: <http://pair-direct.uspto.gov>. Questions re private PAIR: contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum
Examiner
3/3/05



LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600